

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>		<i>Complete if Known</i>		
		Application Number	10/648,767	
		Filing Date	2003-08-25	
		First Named Inventor	LAROIA; Rajiv	
		Art Unit	2618	
		Examiner Name	SOBUTKA, Philip	
Sheet	1	of	5	Attorney Docket No: 060571U2

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number Number-Kind Code ^{2(f known)}	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	001	US4679244	07-07-1987	KAWASAKI; Ryoji et al.	
	002	US4833701	05-23-1989	COMROE; Richard A. et al.	
	003	US5128938	07-07-1992	BORRAS; Jaime A.	
	004	US5387905	02-07-1995	GRUBE; Gary et al.	
	005	US5461645	10-24-1995	ISHII; Junichi	
	006	US5506865	04-09-1996	WEAVER; Jr. lindsay A.	
	007	US5835847	11-10-1998	GILMORE; Robert P. et al.	
	008	US5898925	04-27-1999	HONKASALO; Et al.	
	009	US6377955	04-23-2002	HARTMANN; Charles L. et al.	
	010	US6453151	09-17-2002	KIANG; T. ROGER. et al.	
	011	US6625133	09-23-2003	BALACHANDRAN; Krishna et al.	
	012	US6697417	02-24-2004	FERNANDEZ-CORBATON; Ivan et al.	
	013	US6967937	11-22-2005	GORMLEY; Eamonn	
	014	US7047009	05-16-2006	LAROIA; Rajiv et al.	
	015	US7164883	01-16-2007	RAPPAPORT; Theodore S. et al.	
	016	US7212821	05-01-2007	LAROIA; Rajiv et al.	
	017	US7277709	10-02-2007	VADGAMA; Sunil KESHAVJI.	
	018	US7668573	02-23-2010	LAROIA; Rajiv et al.	
	019	US20030023412	01-30-2003	RAPPAPORT; Theodore S. et al.	

EXAMINER SIGNATURE /Philip Sobutka/

DATE CONSIDERED 01/28/2011

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. † Applicant's unique citation designation number (optional). ‡ See Kind Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. § Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ¶ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. *Kind of document by the appropriate symbols as indicated on the document under WPO Standard ST. 16 if possible. *Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /PS/

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO		<i>Complete if Known</i>	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>		Application Number	10/648,767
		Filing Date	2003-08-25
		First Named Inventor	LAROA; Rajiv
		Art Unit	2618
		Examiner Name	SOBUTKA, Philip
Sheet	2	of	5
		Attorney Docket No: 060571U2	

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number Number-Kind Code ^{2(f known)}	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	020	US20030207693	11-06-2003	RODERIQUE; William JOHN.	
	021	US20060073836	04-06-2006	LAROA; Rajiv; et al.	
	022	US20060203765	09-14-2006	LAROA; Rajiv; et al.	
	023	US20060205356	09-14-2006	LAROA; Rajiv; et al.	
	024	US20060287743	12-21-2006	SAMPATH; Hemanth; et al.	
	025	US20070015541	01-18-2007	DOMINIQUE; Francis; et al.	
	026	US20080051086	02-28-2008	ETEMAD; Kamran; et al.	
	027	US20080159235	07-03-2008	SON; Jung-je; et al.	
	028	US20020012326	01-31-2002	CHANG; Yong	
	029	US20060128410	06-15-2006	DERRYBERRY; Thomas R.; et al.	
	030	US20060285481	12-21-2006	LANE; Frank A.; et al.	

FOREIGN PATENT DOCUMENTS

EXAMINER SIGNATURE /Philip Sobutka/

DATE CONSIDERED 01/28/2011

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /PS/

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>		<i>Complete if Known</i>		
		Application Number	10/648,767	
		Filing Date	2003-08-25	
		First Named Inventor	LAROA; Rajiv	
		Art Unit	2618	
		Examiner Name	SOBUTKA, Philip	
Sheet	3	of	5	Attorney Docket No: 060571U2

Examiner Initials*	Cite No. ¹	Foreign Patent Document Country Code ³ Number ² Kind Code ³ (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
	031	DE10162564A1	07-03-2003	SIEMENS AG.		<input checked="" type="checkbox"/>
	032	JP2001512921T	08-28-2001	Motorola Inc.		<input checked="" type="checkbox"/>
	033	JP2003018641A	01-17-2003	NEC CORP.		<input checked="" type="checkbox"/>
	034	KR20050021083A	03-07-2005	SAMSUNG ELECTRONICS CO LTD.		<input checked="" type="checkbox"/>
	035	CN1265792	09-06-2000	Telefonaktiebolaget LM Ericsson		<input checked="" type="checkbox"/>
	036	CN1316140	10-03-2001	Samsung Electronics Co., Ltd.		<input checked="" type="checkbox"/>
	037	CN1507708	06-23-2004	Broadstorm Telecommunications, Inc.		<input checked="" type="checkbox"/>
	038	EP1207645A1	05-22-2002	LUCENT TECHNOLOGIES INC [US]		<input type="checkbox"/>
	039	JP06268574	09-22-1994	HITACHI LTD.		<input checked="" type="checkbox"/>
	040	JP2007525045T	08-30-2007	Flarion Technologies, Inc.		<input checked="" type="checkbox"/>
	041	KR1019990084525	12-06-1999	LG ELECTRONICS INC.		<input checked="" type="checkbox"/>
	042	KR20040018526	03-03-2004	QUALCOMM Inc.		<input checked="" type="checkbox"/>
	043	WO01035548	05-17-2001	ARRAYCOMM INC.		<input type="checkbox"/>
	044	WO03094544A1	11-13-2003	NOKIA CORP [FI]		<input type="checkbox"/>
	045	WO04084452	09-30-2004	ERICSSON TELEFON AB L M [SE]		<input type="checkbox"/>
	046	WO2005069519	07-28-2005	INTERDIGITAL TECHNOLOGY CORPORATION.		<input type="checkbox"/>

NON PATENT LITERATURE DOCUMENTS

EXAMINER SIGNATURE /Philip Sobutka/

DATE CONSIDERED 01/28/2011

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. * Applicant's unique citation designation number (optional). 2
 See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. * Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). *
 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. * Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. * Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is intended to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /PS/

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO		<i>Complete if Known</i>		
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)		Application Number	10/648,767	
		Filing Date	2003-08-25	
		First Named Inventor	LAROLA; Rajiv	
		Art Unit	2618	
		Examiner Name	SOBUTKA, Philip	
Sheet	4	of	5	Attorney Docket No: 060571U2

Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T2
	047	(060571U1) Written Opinion, PCT/US2004/0005242 - International Search Authority - US - 06/14/06.	<input type="checkbox"/>
	048	Hang Zhang et al, "Clean up for Closed-Loop MIMO in H-ARQ MAP IE", IEEE P802.16e/D7 Broadband Wireless Access Working Group <http://ieee802.org/16>, PP. 1-6, 2010-03-10.	<input type="checkbox"/>
	049	IEEE P802.16e/D5: "Draft IEEE Standard for Local and metropolitan area networks, Part 16: Air Interface for Fixed and Mobile Broadband Wireless Access Systems Amendment for Physical and Medium Access Control Layers for Combined Fixed and Mobile Operation in Licensed Bands", PP. 1-356, September 2004.	<input type="checkbox"/>
	050	IEEE P802.16e/D5: "Draft IEEE Standard for Local and metropolitan area networks, Part 16: Air Interface for Fixed and Mobile Broadband Wireless Access Systems Amendment for Physical and Medium Access Control Layers for Combined Fixed and Mobile Operation in Licensed Bands", PP. 184-190, September 2004.	<input type="checkbox"/>

EXAMINER SIGNATURE /Philip Sobutka/

DATE CONSIDERED 01/28/2011

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. † Applicant's unique citation designation number (optional). ‡ See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. § Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ¶ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. **Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. †† Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /PS/